## BRACHINUS SCLOPETA F. (COL.: CARABIDAE): TWO CAPTURES IN THE PRESENT CENTURY

By A. A. ALLEN, B.Sc., A.R.C.S.\*

Fowler (1887:149) wrote of this small distinctive bombardier beetle:—

"Doubtful as British; at all events, it has not occurred for many years; Devonshire (Leach); Southend (Hope); Hastings, locality doubtful (Stephens); Mr. Matthews tells me that his specimens came from Sowerby, who took a small series "near Margate, Kent", in 1830, and gave some to his father at the timel: he fully believes that they are quite authentic British specimens; the species, however, seems to have entirely disappeared from the county; it is, however, very common near Paris, and is spread widely over southern Europe, so there is no reason why it should not be found in our southern counties."

As far as published records go, nothing more seems to have been heard of *B. sclopeta* in Britain from that time to the present. It is no wonder, therefore, that Joy (1932) omits it from consideration, and that Lindroth (1974:134), whilst finding no reason to doubt at least some of the records, suggests that the species is probably now extinct. It will thus be of much interest to report two apparently unpublished captures of single specimens, dating from more recent times; which, even if they do not greatly alter its status in our fauna, help to justify its retention as a British insect — albeit an extreme rarity.

In conversation with the late A. E. Gardener some 12 or more years ago, I learnt that he considered he had an example of this *Brachinus* from Eastbourne and intended to publish the record; but in the event, his untimely death intervened. Lately, wishing to remedy the omission, I wrote to the National Museum of Wales, Cardiff, requesting to be allowed to see the specimen, whereupon the Curator most kindly sent not only the Eastbourne one but also another (to which I shall return). Both are undoubted *B. sclopeta*, and had in fact been confirmed as such by the Museum staff. The former bears the data "Beachy Head/Eastbourne, Sx/1-14.x.1928/E. Gardner". It is of somewhat ancient appearance, having been originally pinned and at some time since attacked by mould; the left elytron had become detached, probably in cleaning, and had been re-fixed in position.

I Stephens (1839) did not know of this occurrence, the only one in which a number of examples were definitely involved. They passed later into some of the old collections; I have a very good one purchased about 1930 from Messrs. W. H. Janson, with a label "supposed to have been taken at Margate" and "ex coll. J. C. Lewis", and others from the same source are in the BMNH.

<sup>\*49</sup> Montcalm Road, Charlton, London SE7 8QG.

If Stephens was uncertain in 1828 (p.36, and cf. Fowler, *supra*) whether he had taken his specimen at Hastings or elsewhere — it is in his collection, without data of course — he indicates no such doubt in his later work (1839:9). Be that as it may, this newer capture enables us to delete the note of interrogation regarding the status of *B. sclopeta* on the Sussex list.

The second specimen is from J. R. le B. Tomlin's collection, and carries a label "Gray coll./Esher", but no date. It is thought, however, to have been probably taken about the turn of the century. Being in mint condition (without even a pinhole) it seems most unlikely to date from much before that, and in the absence of anything positive may perhaps be regarded as a 20th-century capture - if only just. The locality, too, raises questions. Esher has been one of the best-worked haunts of London entomologists from early times, situated in an inland county (Surrey), and quite unlike any of the other recorded localities on or near the south or southeast coast where the insect's extreme northern limit seems to be reached. That B. sclopeta occurred naturally at Esher (while of course possible) appears so improbable that I am inclined to suspect either some confusion, e.g. a transposed label, or a chance importation. The fact the Tomlin apparently never published the record suggests that he may have been of the same mind.

Beachy Head, on the other hand, is a locality far more in keeping with the few that are known. A single specimen might admittedly have been a casual immigrant or introduction; but, whether it was found on the high ground at the top, or on the undercliff below, there could well have been a colony somewhere on the inaccessible cliff-face — conceivably it might still be there. Further, the Margate occurrence prompts the thought that there must be potential habitats even to-day on the cliffs of Thanet where, should the beetle yet survive, it would be practically safe from collectors or other marauders!

The old records given by Fowler are not quite complete. On the authority of Stephens's *Manual* (1839:9), which Fowler would appear not to have consulted, it is possible to add a second (in fact the first published) for Kent, namely Faversham — presumably a capture made in the previous decade.

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## References

Fowler, W. W. 1887. The Coleoptera of the British Islands, 1. London.

Lindroth, C. H. 1974. Coleoptera: Carabidae. *Handb. Ident. Brit. Insects*, 4 (2).

Stephens, J. F. 1828. *Illustrations of British Entomology: Mandibulata*, 1. London.

Stephens, J. F. 1839. A Manual of British Coleoptera, or Beetles. London.

FURTHER APPEARANCES OF PULICALVARIA PICEAELLA KEARFOTT (LEP.: GELECHIIDAE). — On 10th. July 1983 and again on 9th. July 1984, I found a small Gelechiid moth in my garden m.v. at Winchester, Hants (VC 11). Both were males but neither the external characteristics nor the genitalia could be related to any species described in British literature, and, in a telephone discussion, Mr. E. C. Pelham-Clinton suggested that they could be *Pulicalvaria piceaella* and gave reference to Canadian literature in which the male genitalia are illustrated and the species described. Check with this literature (*Can. Ent.* 94: 1198-1215; 1962) showed that this suggestion was correct.

The first British specimen of this moth was taken by W. E. Minnion in June 1952 at Pinner in Middlesex and the second by A. A. Allen on 6th July 1959 at Blackheath, London (Ent. Rec. 73: 40:41; 1961). at which time the species was assigned to the genus Recurvaria Haworth, subsequently to Eucordylea Dietz and currently to a new genus Pulicalvaria Freeman. I understand that subsequently a further one or two specimens were also taken in the south-east of the country.

It would therefore appear that this species may be breeding and spreading in this country and search for larvae might prove rewarding. According to the Can. Ent. reference quoted above, they feed on various species of spruce including *Picea abies*, but apparently prefer P. glauca. The larvae hibernate and then feed again for a short period in the spring, the feeding larvae having sclerotized areas bright shiny brown, with an orange-brown body, whilst in the hibernating larva the sclerotized areas are dark brown or nearly black with a deep pink or brick-red body. It is a needle and bud miner but may also be on insect of damaged cones or foliage, old staminate flowers, galls etc. Three other related spruce feeding species (Eucordylea blastovora McLeod; E. ducharmei Freeman and E. atrupictella Dietz) which to date have not been recorded from Britain are also described, but P. piceaella is the only one of these which hibernates as a larva. - Col. D. H. STERLING, "Tangmere", 2 Hampton Lane, Winchester, Hants, SO22 5LF.